DETAILED ESTIMATE

BRUHAT BANGALORE MAHANAGARA PALIKE

PACKAGE-8

NAME OF WORK : IMPROVEMENTS TO ROADS AND DRAINS AT LAKKAPPA LAYOUT, MARIYAMMA BLOCK, HVV VALLEY & MUNRAMAYYA BLOCK IN WARD NO. 11 KUVEMPUNAGARA.

Sl.No.	Description of work	Measurement					Qty	Rate	Amount
		Unit	No	L	B	D			
1	KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1)								
	New Drain								
	MS PALYA								
	Koya Factory Left side road (back side),'T' shape road	Cum	2	51.70	0.60	0.60	37.22		
	MS palya to Bellahalli road	Cum	2	79.30	0.60	0.60	57.10		
	Desilting drain								
	HVV LAYOUT								
	1st Main road	Cum	2	218.50	0.60	0.40	104.88		
	2nd Main road	Cum	2	158.40	0.60	0.40	76.03		
	1st cross	Cum	2	117.70	0.60	0.40	56.50		
	2nd cross	Cum	2	102.30	0.60	0.40	49.10		
	3rd cross (minister's house)	Cum	2	86.90	0.60	0.40	41.71		
	Muneshwara block main road (from temple to dead end) Double Lane	Cum	2	205.50	0.60	0.40	98.64		
	MS PALYA								
	Koya Factory Left side road (back side),'T' shape road	Cum	2	39.60	0.60	0.40	19.01		
	Koya Factory opposite road (from tipu sultan road to dead end)	Cum	2	180.40	0.60	0.40	86.59		
	Basic rate							157.00	
	Area weightage 6%							9.42	
	Total						**626.78**	**166.42**	**104309.39**
2	KSRB 4-1.3 : Providing and laying in position plain cement concrete of mix 1:4:8(M7.5)with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregtes @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No. KBS 4.1, 4.2 (P.No.12/I.No. 4.3)								
	New Drain								
	MS PALYA								
	Koya Factory Left side road (back side),'T' shape road	Cum	2	51.70	0.60	0.15	9.31		
	MS palya to Bellahalli road	Cum	2	79.30	0.60	0.15	14.27		
	Basic rate							4867.00	
	Area weightage 6%							292.02	
	Total						**23.58**	**5159.02**	**121649.69**
3	Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32)								
	Closed Drain								
	Cover Slab								
	HVV LAYOUT								

	1st Main road	Sqm	2	218.50	0.60		262.20		
	2nd Main road	Sqm	2	158.40	0.60		190.08		
	1st cross	Sqm	2	117.70	0.60		141.24		
	2nd cross	Sqm	2	102.30	0.60		122.76		
	3rd cross (minister's house)	Sqm	2	86.90	0.60		104.28		
	Muneshwara block main road (from temple to dead end) Double Lane	Sqm	2	205.50	0.60		246.60		
	Existing Closed Drain								
	Cover Slab								
	MS PALYA								
	Koya Factory Left side road (back side),'T' shape road	Sqm	1	39.60	0.60		23.76		
	Koya Factory opposite road (from tipu sultan road to dead end)	Sqm	2	180.40	0.60		216.48		
	Existing Open Drain (Sides & Bottom)								
	MS PALYA								
	Koya Factory Left side road (back side),'T' shape road	Sqm	1	39.60	1.80		71.28		
	Sub Total						**1378.68**		
	Consider 5% Qnty for Removing	Sqm					**68.93**		
	Basic rate							62.00	
	Area weightage 6%							3.72	
	Total						**68.93**	**65.72**	**4530.34**
4	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25-I.No.5.33)								
	Closed Drain								
	Cover Slab								
	HVV LAYOUT								
	1st Main road	Sqm	2	218.50	0.60		262.20		
	2nd Main road	Sqm	2	158.40	0.60		190.08		
	1st cross	Sqm	2	117.70	0.60		141.24		
	2nd cross	Sqm	2	102.30	0.60		122.76		
	3rd cross (minister's house)	Sqm	2	86.90	0.60		104.28		
	Muneshwara block main road (from temple to dead end) Double Lane	Sqm	2	205.50	0.60		246.60		
	MS PALYA								
	Koya Factory Left side road (back side),'T' shape road	Sqm	1	39.60	0.60		23.76		
	Koya Factory opposite road (from tipu sultan road to dead end)	Sqm	2	180.40	0.60		216.48		
	Sub Total						**1307.40**		
	Consider 30% Qnty for Removing & Refixing						**392.22**		
	Basic rate							76.00	
	Area weightage 6%							4.56	

	Total						392.22	80.56	31597.24
5	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.1)								
	Closed Drain								
	Cover Slab								
	HVV LAYOUT								
	1st Main road	Sqm	2	218.50	0.60		262.20		
	2nd Main road	Sqm	2	158.40	0.60		190.08		
	1st cross	Sqm	2	117.70	0.60		141.24		
	2nd cross	Sqm	2	102.30	0.60		122.76		
	3rd cross (minister's house)	Sqm	2	86.90	0.60		104.28		
	Muneshwara block main road (from temple to dead end) Double Lane	Sqm	2	205.50	0.60		246.60		
	MS PALYA				**Sub Total**		**1067.16**		
	Consider 5% Qnty for Refixing						**53.36**		
	Koya Factory Left side road (back side),'T' shape road	Sqm	2	51.70	0.60		**62.04**		
	Existing Closed Drain								
	Cover Slab								
	MS PALYA								
	Koya Factory Left side road (back side),'T' shape road	Sqm	1	39.60	0.60		23.76		
	Koya Factory opposite road (from tipu sultan road to dead end)	Sqm	2	180.40	0.60		216.48		
						Sub Total	**240.24**		
	Consider 5% Qnty for Refixing (for existing drain only)	Sqm			(64.80*5%)=		**12.01**		
	Basic rate							628.00	
	Area weightage 6%							37.68	
	Total						**127.41**	**665.68**	**84814.29**
6	Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.2)								
	New Drain								
	MS PALYA								
	Koya Factory Left side road (back side),'T' shape road								
	At Bottom	Sqm	2	51.70	0.60		62.04		
	At Sides	Sqm	4	51.70	0.60		124.08		
	MS palya to Bellahalli road								
	At Bottom	Sqm	2	79.30	0.60		95.16		
	At Sides	Sqm	4	79.30	0.60		190.32		
						Sub Total	**471.60**		
	Existing Open Drain (Sides & Bottom)								
	MS PALYA								
	Koya Factory Left side road (back side),'T' shape road	Sqm	1	39.60	1.80		71.28		

	Consider 5% Qnty for Refixing (for existing drain only)	Sqm			(64.80*5%)=		**3.56**		
	Basic rate							779.00	
	Area weightage 6%							46.74	
	Total						**475.16**	**825.74**	**392361.92**
7	KSRB 300-1 : Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications.(P.No.142,I.No.19.1)								
	HVV LAYOUT								
	2nd Main road	Cum	1	6.27	0.20	0.23	0.29		
	Basic rate							82.00	
	Area weightage 6%							4.92	
	Total						**0.29**	**86.92**	**25.07**
8	Excavation in Soil using Hydraulic Excavator CK 90 and Tippers with Disposal KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location and complete as per specifications. MORTH Specification No.301 Page No. 143, Item No. 19.14								
	For New Road								
	MS PALYA								
	MS palya to Bellahalli road	Cum	1	79.30	6.00	0.15	71.37		
	Basic rate							46.00	
	Area weightage 6%							2.76	
	Total						**71.37**	**48.76**	**3480.00**
9	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139)								
	Considered same Qty vide I.No.1 +I.No.3+I.No.8+ I.No.9	Cum					698.44		
	Average Weight of Earth (1.28 Ton/cum, Basic rate Rs.2.00 Tonne/Km.) For 15 Kms = (2.00 x 1.28 x 15)/-		38.40						
	KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1)		68.00						
	Total rate per Cum		106.40						
	Basic rate							106.40	
	Area weightage 6%							6.384	
	Total						**698.44**	**112.78**	**78773.13**
10	KSRRB M300- Construction of Embankment with Material Gravel/ Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density) MORTH Specification No. 305								
	For New Road								
	MS PALYA								
	MS palya to Bellahalli road	Cum	1	79.30	6.00	0.25	118.95		
	Basic rate							302.00	
	Area weightage 6%							18.12	
	Total						**118.95**	**320.12**	**38078.27**

11	Pg. No. 149, Item No. 19.64,KSRRB 300-Compaction KSRRB 300-58. Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications. MORTH / Chapter 3								
	For New Road								
	MS PALYA								
	MS palya to Bellahalli road	Sqm	1	79.30	6.00		475.80		
	Basic rate							5.00	
	Area weightage 6%							0.30	
	Total						**475.80**	**5.30**	**2521.74**
12	KSRRB M400-17.Providing,laying, spreading and compacting crushed stone aggregates of granite/trap/ basalt to wet mix macadam specification including pre mixing the Material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub-base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density. complete as per specifications.MORTH specification No.406(Page No.158,I.No.20.18)								
	HVV LAYOUT								
	2nd Main road	Cum	1	6.27	0.20	0.23	0.29		
	MS PALYA								
	MS palya to Bellahalli road	Cum	1	79.30	6.00	0.25	118.95		
	Basic rate							1668.00	
	Basic rate							1668.00	
	Area weightage 6%							100.08	
	Total						**119.24**	**1768.08**	**210823.07**
13	KSRRB 300-49. Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by manual means without disturbing the base and stacking of the debris materials including cost of all labour charges complete as per specifications (P.No.147,I.No.19.55)								
	HVV LAYOUT								
	1st Main road	Sqm	1	218.50	5.90		1289.15		
	Basic rate							57.00	
	Area weightage 6%							3.42	
	Total						**1289.15**	**60.42**	**77890.44**
14	KSRRB 500-1.Cleaning the existing WBM Road surface including removing of binding materials and other foreign matter with wire brushes and small picks sweeping with brooms or soft brushes and finally dusting with old gunny bags and bar or compressed air to receive bituminous treatment including cost of all materials, labhour, HOM of machineries complet as per specifications.(P.No.161,I.No.21.1)								
	HVV LAYOUT								
	1st Main road	Sqm	1	218.50	5.90		1289.15		
	2nd Main road	Sqm	1	6.27	0.20		1.25		
	MS PALYA								
	MS palya to Bellahalli road	Sqm	1	79.30	6.00		475.80		
	Basic rate							13.00	
	Area weightage 6%							0.78	
	Total						**1766.20**	**13.78**	**24338.29**
15	KSRRB 500-9.Providing and applying tack coat using 80/100 grade bitumen (VG 10) on granular base such as WBM surface hot bitumen primed at 4kg per 10 sqm heating bitumen in boiler with spray set (Excluding cleaning of Road surface) inlcuding cost of all materials, labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.9)								
	Considered same Above Qty	Sqm					1766.20		
	Basic rate							18.00	
	Area weightage 6%							1.08	
	Total						**1766.20**	**19.08**	**33699.17**

16	KSRRB 500-11. Providing and laying bituminous macadam on prepared surface with crushed coarse as per design mix formula for base / binding courseincluding loading of aggregates with F.E. loader, hot mixing of stone aggregates and bitumen in hot mix plant,transporting the mixed material in tipper to paver and laying mixed materials, with paver finisher to the required level and grade,rolling by power roller to achieve the desired density,but excluding cost of primer/tack coat including lead,lift and cost of all materials,labour,HOM of machineries complete as per specifications MORTH chapter 5 Using 100/120 TPH capacity H.M.P with sensor paver Gr-II (50 mm to 75mm) with 3.4% VG - 30 Bitumen(P.No.162-I.No.21.11.2)								
	HVV LAYOUT								
	1st Main road	Cum	1	218.50	5.90	0.05	64.46		
	2nd Main road	Cum	1	6.27	0.20	0.05	0.06		
	MS PALYA								
	MS palya to Bellahalli road	Cum	1	79.30	6.00	0.05	23.79		
	Sub Total						**88.31**		
	Consider 5% qty for Profile correction and Dipression filling						**4.4155**		
	Basic rate							5409.00	
	Area weightage 6%							324.54	
	Total						**92.73**	**5733.54**	**531646.57**
17	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.2).								
	HVV LAYOUT								
	For Road surface								
	1st Main road	Sqm	1	218.50	5.90		1289.15		
	2nd Main road	Sqm	1	158.40	5.75		910.80		
	1st cross	Sqm	1	117.70	5.00		588.50		
	2nd cross	Sqm	1	102.30	5.60		572.88		
	3rd cross (minister's house)	Sqm	1	86.90	5.80		504.02		
	Muneshwara block main road (from temple to dead end) Double Lane	Sqm	1	205.50	12.33		2534.43		
	MS PALYA								
	Koya Factory Left side road (back side),'T' shape road	Sqm	1	39.60	4.20		166.32		
		Sqm	1	51.70	3.70		191.29		
	Koya Factory opposite road (from tipu sultan road to dead end)	Sqm	1	213.40	4.60		981.64		
	MS palya to Bellahalli road	Sqm	1	79.30	6.00		475.80		
	Basic rate							3.00	
	Area weightage 6%							0.18	
	Total						**8214.83**	**3.18**	**26123.16**
18	KSRRB M500-10.Providing and applying tack coat using 80/100 grade bitumen(VG10) in boiler fitted with spray set distributor at the rate of 0.20kg per sqm on the existing prepared bituminous surface cleaned with mechanical broom. complete as per specification. MORTH Specifiacation clause No. 503.using Bitumen 80/100 (VG-10) on Primed surface.(P.No.162,I.No. 21.10.2) .								
	HVV LAYOUT								
	For Road surface								
	1st Main road	Sqm	1	218.50	5.90		1289.15		
	2nd Main road	Sqm	1	158.40	5.75		910.80		
	1st cross	Sqm	1	117.70	5.00		588.50		
	2nd cross	Sqm	1	102.30	5.60		572.88		
	3rd cross (minister's house)	Sqm	1	86.90	5.80		504.02		

	Muneshwara block main road (from temple to dead end) Double Lane	Sqm	1	205.50	12.33		2534.43		
	MS PALYA								
	Koya Factory Left side road (back side),'T' shape road	Sqm	1	39.60	4.20		166.32		
		Sqm	1	51.70	3.70		191.29		
	Koya Factory opposite road (from tipu sultan road to dead end)	Sqm	1	213.40	4.60		981.64		
	MS palya to Bellahalli road	Sqm	1	79.30	6.00		475.80		
	Basic rate							9.00	
	Area weightage 6%							0.54	
	Total						**8214.83**	**9.54**	**78369.49**
19	KSRRB M500-19. Providing and laying bituminous concrete using crushed aggregates of specified grading,premixed with bituminous binder and filler,transporting the hot mix to work site,laying with a paver finisher to the required grade, level and alignment,rolling with smooth wheeled,vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No.500.9 complete in all respects complete as per specifications. using 40/60 TPH capacity H.M.P with mechanical Paver Gr-II(30mm to 45mm) with 5.4% CRMB 55 (P.No.165-								
	HVV LAYOUT								
	1st Main road	Cum	1	218.50	5.90	0.04	51.57		
	2nd Main road	Cum	1	158.40	5.75	0.04	36.43		
	1st cross	Cum	1	117.70	5.00	0.04	23.54		
	2nd cross	Cum	1	102.30	5.60	0.04	22.92		
	3rd cross (minister's house)	Cum	1	86.90	5.80	0.04	20.16		
	Muneshwara block main road (from temple to dead end) Double Lane	Cum	1	205.50	12.33	0.04	101.38		
	MS PALYA								
	Koya Factory Left side road (back side),'T' shape road	Cum	1	39.60	4.20	0.04	6.65		
		Cum	1	51.70	3.70	0.04	7.65		
	Koya Factory opposite road (from tipu sultan road to dead end)	Cum	1	213.40	4.60	0.04	39.27		
	MS palya to Bellahalli road	Cum	1	79.30	6.00	0.04	19.03		
	Profile correction & Pot Hole Filling	**No.*(1/2)*Length*(20%*Width)*Depth**							
	HVV LAYOUT								
	1st Main road	Cum	1	218.50	5.90	0.04	5.16		
	2nd Main road	Cum	1	158.40	5.75	0.04	3.64		
	1st cross	Cum	1	117.70	5.00	0.04	2.35		
	2nd cross	Cum	1	102.30	5.60	0.04	2.29		
	3rd cross (minister's house)	Cum	1	86.90	5.80	0.04	2.02		
	Muneshwara block main road (from temple to dead end) Double Lane	Cum	1	205.50	12.33	0.04	10.14		
	MS PALYA								
	Koya Factory Left side road (back side),'T' shape road	Cum	1	39.60	4.20	0.04	0.67		

		Cum	1	51.70	3.70	0.04	0.77		
	Koya Factory opposite road (from tipu sultan road to dead end)	Cum	1	213.40	4.60	0.04	3.93		
	MS palya to Bellahalli road	Cum	1	79.30	6.00	0.04	1.90		
	Basic rate							8502.00	
	Area weightage 6%							510.12	
	Total						**361.45**	**9012.12**	**3257454.08**
20	Providing Plastic to Bituminous concrete @ 8%								
	8% OF BC	Kg		0.08	361.45	117.00	**3383.20**		
	Basic rate							27.00	
	Area weightage 6%							1.62	
	Total						**3383.20**	**28.62**	**96827.08**
21	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.185- I.No.24.15)								
	HVV LAYOUT								
	1st Main road	Sqm	1	218.50	0.10		21.85		
	2nd Main road	Sqm	1	158.40	0.10		15.84		
	1st cross	Sqm	1	117.70	0.10		11.77		
	2nd cross	Sqm	1	102.30	0.10		10.23		
	3rd cross (minister's house)	Sqm	1	86.90	0.10		8.69		
	Muneshwara block main road (from temple to dead end) Double Lane	Sqm	1	205.50	0.10		20.55		
	MS PALYA								
	Koya Factory Left side road (back side),'T' shape road	Sqm	1	39.60	0.10		3.96		
		Sqm	1	51.70	0.10		5.17		
	Koya Factory opposite road (from tipu sultan road to dead end)	Sqm	1	213.40	0.10		21.34		
	MS palya to Bellahalli road	Sqm	1	79.30	0.10		7.93		
	Basic rate							512.00	
	Area weightage 6%							30.72	
	Total						**127.33**	**542.72**	**69104.54**
								Sub Total	**5268416.98**
								Preparation of DPR And Project management Consultancy Charges(2% of estimated cost)	120000
								Tender Premium 10% of estimated Cost	600000
								Miscellenious and rounding	11583
								TOTAL AMOUNT	**6000000**
								RUPEES SIXTY LAKHS ONLY	

ADMINISTRATIVE APPROVAL
Accorded For Rs. 20.55 Sixty lakhs only
Head of A/C P-2111
Div. Ref. No. 124/17-18 Date 19/12/17
AE
EE(BTP) 19/12

Technical Sanction
Accorded for Rs. sixty lakhs only
A/C P-2111
CER NO TS/1 92/17-18 Dt. 22.12.17
CE (TNK)

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

BRUHAT BANGALORE MAHANAGARA PALIKE

PACKAGE-8

NAME OF WORK : IMPROVEMENTS TO ROADS AND DRAINS AT VARADARAJA NAGARA, BALAJI LAYOUT, SIMHADRI LAYOUT, MUNISWAMAPPA LAYOUT, PAKRUTHI LAYOPUT,EXPRESS LAYOUT & GREEN VALLEY LAYOUT IN WARD NO. 11 KUVEMPUNAGARA.

Sl.No.	Description of work	Mesurement					Qty	Rate	Amount
		Unit	No	L	B	D			
1	KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1)								
	Desilting drain								
	SIMHADRI LAYOUT								
	Dead end to commander apartment(right side)Main Road	Cum	2	64.90	0.60	0.40	31.15		
	Lakshmipura Main Road to singapura Road	Cum	1	502.50	0.60	0.40	120.60		
	BALAJI LAYOUT								
	2nd main 1st cross	Cum	2	162.80	0.60	0.40	78.14		
	2nd main 2nd cross	Cum	2	63.80	0.60	0.40	30.62		
	(from 2nd main to MS	Cum	2	61.60	0.60	0.40	29.57		
	palya)	Cum	2	99.00	0.60	0.40	47.52		
	Basic rate							157.00	
	Area weightage 6%							9.42	
	Total						**337.61**	**166.42**	**56184.72**
2	Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32)								
	Closed Drain								
	Cover Slab								
	BALAJI LAYOUT								
	2nd main 2nd cross	Sqm	1	100.10	0.60		60.06		
	(from 2nd main to MS	Sqm	1	61.60	0.60		36.96		
	Open Drain (Sides & Bottom)								
	Drain slab								
	SIMHADRI LAYOUT								
	Dead end to commander apartment(right side)Main Road	Sqm	2	64.90	1.80		233.64		
	Lakshmipura Main Road to singapura Road	Sqm	1	502.50	1.80		904.50		
	BALAJI LAYOUT								
	2nd main 1st cross	Sqm	2	162.80	1.80		586.08		
	2nd main 2nd cross	Sqm	1	27.50	1.80		49.50		
	(from 2nd main to MS	Sqm	1	61.60	1.80		110.88		
	palya)	Sqm	2	99.00	1.80		356.40		
	Sub Total						**2338.02**		
	Consider 5% Qnty for Removing						**116.90**		
	Basic rate							62.00	
	Area weightage 6%							3.72	
	Total						**116.90**	**65.72**	**7682.73**
3	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25-I.No.5.33)								
	Closed Drain								
	Cover Slab								

	BALAJI LAYOUT								
	2nd main 2nd cross	Sqm	1	100.10	0.60		60.06		
	(from 2nd main to MS	Sqm	1	61.60	0.60		36.96		
	Sub Total						**97.02**		
	Consider 30% Qnty for Removing & Refixing						**29.11**		
	Basic rate							76.00	
	Area weightage 6%							4.56	
	Total						**29.11**	**80.56**	**2344.78**
4	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.1)								
	Closed Drain								
	Cover Slab								
	BALAJI LAYOUT								
	2nd main 2nd cross	Sqm	1	100.10	0.60		60.06		
	(from 2nd main to MS	Sqm	1	61.60	0.60		36.96		
	Sub Total						**97.02**		
	Consider 5% Qnty for Removing						**4.85**		
	Basic rate							628.00	
	Area weightage 6%							37.68	
	Total						**4.85**	**665.68**	**3229.21**
5	Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.2)								
	Open Drain (Sides & Bottom)								
	Drain slab								
	SIMHADRI LAYOUT								
	Dead end to commander apartment(right side)Main Road	Sqm	2	64.90	1.80		233.64		
	Lakshmipura Main Road to singapura Road	Sqm	1	502.50	1.80		904.50		
	BALAJI LAYOUT								
	2nd main 1st cross	Sqm	2	162.80	1.80		586.08		
	2nd main 2nd cross	Sqm	1	27.50	1.80		49.50		
	(from 2nd main to MS	Sqm	1	61.60	1.80		110.88		
	palya)	Sqm	2	99.00	1.80		356.40		
	Sub Total						**2241.00**		
	Consider 5% Qnty for Refixing						**112.05**		
	Basic rate							779.00	
	Area weightage 6%							46.74	
	Total						**112.05**	**825.74**	**92524.17**
6	KSRB 300-1 : Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications.(P.No.142,I.No.19.1)								
	Road cutting portions								
	SIMHADRI LAYOUT								
	Dead end to commander apartment(right side)Main Road	Cum	1	64.90	9.20	0.23	137.33		
	Lakshmipura Main Road to singapura Road	Cum	1	502.50	7.80	0.23	901.49		

	Basic rate							82.00	
	Area weightage 6%							4.92	
	Total						1038.81	86.92	90293.66
7	Excavation in Soil using Hydraulic Excavator CK 90 and Tippers with Disposal KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location and complete as per specifications. MORTH Specification No.301 Page No. 143, Item No. 19.14								
	For New Road								
	SIMHADRI LAYOUT								
	Cross roads (Beside Commander Glory	Cum	1	88.00	3.10	0.15	40.92		
		Cum	1	145.20	4.90	0.15	106.72		
	Basic rate							46.00	
	Area weightage 6%							2.76	
	Total						147.64	48.76	7199.02
8	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139)								
	Considered same Qty vide I.No.1+I.No.6+ I.No.7	Cum					1524.06		
	Average Weight of Earth (1.28 Ton/cum, Basic rate Rs.2.00 Tonne/Km.) For 15 Kms = (2.00 x 1.28 x 15)/-		38.40						
	KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1)		68.00						
	Total rate per Cum		106.40						
	Basic rate							106.40	
	Area weightage 6%							6.384	
	Total						1524.06	112.78	171889.97
9	KSRRB M300- Construction of Embankment with Material Gravel/ Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density) MORTH Specification No. 305								
	For New Road								
	SIMHADRI LAYOUT								
	Cross roads (Beside Commander Glory	Cum	1	88.00	3.10	0.25	68.20		
		Cum	1	145.20	4.90	0.25	177.87		
	Basic rate							302.00	
	Area weightage 6%							18.12	
	Total						246.07	320.12	78771.93
10	Pg. No. 149, Item No. 19.64,KSRRB 300-Compaction KSRRB 300-58. Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications. MORTH / Chapter 3								
	For New Road								
	SIMHADRI LAYOUT								
	Cross roads (Beside Commander Glory	Sqm	1	88.00	3.10		272.80		
		Sqm	1	145.20	4.90		711.48		
	Basic rate							5.00	
	Area weightage 6%							0.30	
	Total						984.28	5.30	5216.68
11	KSRRB M400-17.Providing,laying, spreading and compacting crushed stone aggregates of granite/trap/ basalt to wet mix macadam specification including pre mixing the Material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub-base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density. complete as per specifications.MORTH specification No.406(Page No.158,I.No.20.18)								

	Road cutting portions								
	SIMHADRI LAYOUT								
	Dead end to commander apartment(right side)Main Road	Cum	1	64.90	9.20	0.23	137.33		
	Lakshmipura Main Road to singapura Road	Cum	1	502.50	7.80	0.23	901.49		
	Cross roads (Beside Commander Glory	Cum	1	88.00	3.10	0.25	68.20		
		Cum	1	145.20	4.90	0.25	177.87		
	Basic rate							1668.00	
	Area weightage 6%							100.08	
	Total						**1284.88**	**1768.08**	**2271776.64**
12	KSRRB 300-49. Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by manual means without disturbing the base and stacking of the debris materials including cost of all labour charges complete as per specifications (P.No.147,I.No.19.55)								
	BALAJI LAYOUT								
	2nd main 2nd cross (from 2nd main to MS palya)	Sqm	1	61.60	2.50		154.00		
	Basic rate							57.00	
	Area weightage 6%							3.42	
	Total						**154.00**	**60.42**	**9304.68**
13	KSRRB 500-1.Cleaning the existing WBM Road surface including removing of binding materials and other foreign matter with wire brushes and small picks sweeping with brooms or soft brushes and finally dusting with old gunny bags and bar or compressed air to receive bituminous treatment including cost of all materials, labhour, HOM of machineries complet as per specifications.(P.No.161,I.No.21.1)								
	Road cutting portions								
	SIMHADRI LAYOUT								
	Dead end to commander apartment(right side)Main Road	Sqm	1	64.90	9.20		597.08		
	Lakshmipura Main Road to singapura Road	Sqm	1	502.50	7.80		3919.50		
	Cross roads (Beside Commander Glory	Sqm	1	88.00	3.10		272.80		
		Sqm	1	145.20	4.90		711.48		
	BALAJI LAYOUT								
	2nd main 2nd cross (from 2nd main to MS palya)	Sqm	1	61.60	2.50		154.00		
	Basic rate							13.00	
	Area weightage 6%							0.78	
	Total						**5654.86**	**13.78**	**77923.97**
14	KSRRB 500-9.Providing and applying tack coat using 80/100 grade bitumen (VG 10) on granular base such as WBM								
	Considered same Above Qty	Sqm					5654.86		
	Basic rate							18.00	
	Area weightage 6%							1.08	
	Total						**5654.86**	**19.08**	**107894.73**

15	KSRRB 500-11. Providing and laying bituminous macadam on prepared surface with crushed coarse as per design mix formula for base / binding courseincluding loading of aggregates with F.E. loader, hot mixing of stone aggregates and bitumen in hot mix plant,transporting the mixed material in tipper to paver and laying mixed materials, with paver finisher to the required level and grade,rolling by power roller to achieve the desired density,but excluding cost of primer/tack coat including lead,lift and cost of all materials,labour,HOM of machineries complete as per specifications MORTH chapter 5 Using 100/120 TPH capacity H.M.P with sensor paver Gr-II (50 mm to 75mm) with 3.4% VG - 30 Bitumen(P.No.162-I.No.21.11.2)								
	SIMHADRI LAYOUT								
	Dead end to commander apartment(right side)Main Road	Cum	1	64.90	9.20	0.05	29.85		
	Lakshmipura Main Road to singapura Road	Cum	1	502.50	7.80	0.05	195.98		
	Cross roads (Beside Commander Glory	Cum	1	88.00	3.10	0.05	13.64		
		Cum	1	145.20	4.90	0.05	35.57		
	BALAJI LAYOUT								
	2nd main 2nd cross (from 2nd main to MS palya)	Cum	1	61.60	2.50	0.05	7.70		
	Sub Total						**282.74**		
	Consider 5% qty for Profile correction and Dipression filling						**14.14**		
	Basic rate							5409.00	
	Area weightage 6%							324.54	
	Total						**296.88**	**5733.54**	**1702174.22**
16	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.2).								
	For Road surface								
	SIMHADRI LAYOUT								
	Dead end to commander apartment(right side)Main Road	Sqm	1	64.90	9.20		597.08		
	Lakshmipura Main Road to singapura Road	Sqm	1	502.50	7.80		3919.50		
	Cross roads (Beside Commander Glory	Sqm	1	88.00	3.10		272.80		
		Sqm	1	145.20	4.90		711.48		
	BALAJI LAYOUT								
	For Road surface								
	2nd main 1st cross	Sqm	1	162.80	5.40		879.12		
	2nd main 2nd cross (from 2nd main to MS palya)	Sqm	1	63.80	3.80		242.44		
		Sqm	1	61.60	2.50		154.00		
		Sqm	1	99.00	7.40		732.60		
	Basic rate							3.00	
	Area weightage 6%							0.18	
	Total						**7509.02**	**3.18**	**23878.68**
17	KSRRB M500-10.Providing and applying tack coat using 80/100 grade bitumen(VG10) in boiler fitted with spray set distributor at the rate of 0.20kg per sqm on the existing prepared bituminous surface cleaned with mechanical broom. complete as per specification. MORTH Specifiacation clause No. 503.using Bitumen 80/100 (VG-10) on Primed surface.(P.No.162,I.No. 21.10.2) .								
	For Road surface								
	SIMHADRI LAYOUT								

	Dead end to commander apartment(right side)Main Road	Sqm	1	64.90	9.20		597.08		
	Lakshmipura Main Road to singapura Road	Sqm	1	502.50	7.80		3919.50		
	Cross roads (Beside Commander Glory	Sqm	1	88.00	3.10		272.80		
		Sqm	1	145.20	4.90		711.48		
	BALAJI LAYOUT								
	For Road surface								
	2nd main 1st cross	Sqm	1	162.80	5.40		879.12		
	2nd main 2nd cross	Sqm	1	63.80	3.80		242.44		
	(from 2nd main to MS	Sqm	1	61.60	2.50		154.00		
	palya)	Sqm	1	99.00	7.40		732.60		
	Basic rate							9.00	
	Area weightage 6%							0.54	
	Total						**7509.02**	**9.54**	**71636.05**
18	KSRRB M500-19. Providing and laying bituminous concrete using crushed aggregates of specified grading,premixed with bituminous binder and filler,transporting the hot mix to work site,laying with a paver finisher to the required grade, level and alignment,rolling with smooth wheeled,vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No.500.9 complete in all respects complete as per specifications. using 40/60 TPH capacity H.M.P with mechanical Paver Gr-II(30mm to 45mm) with 5.4% CRMB 55 (P.No.165- I.No.21.23.6)								
	SIMHADRI LAYOUT								
	Dead end to commander apartment(right side)Main Road	Cum	1	64.90	9.20	0.04	23.88		
	Lakshmipura Main Road to singapura Road	Cum	1	502.50	7.80	0.04	156.78		
	Cross roads (Beside Commander Glory	Cum	1	88.00	3.10	0.04	10.91		
		Cum	1	145.20	4.90	0.04	28.46		
	BALAJI LAYOUT								
	2nd main 1st cross	Cum	1	162.80	5.40	0.04	35.16		
	2nd main 2nd cross	Cum	1	63.80	3.80	0.04	9.70		
	(from 2nd main to MS	Cum	1	61.60	2.50	0.04	6.16		
	palya)	Cum	1	99.00	7.40	0.04	29.30		
	Profile correction & Pot Hole Filling	**No.*(1/2)*Length*(20%*Width)*Depth**							
	SIMHADRI LAYOUT								
	Dead end to commander apartment(right side)Main Road	Cum	1	64.90	9.20	0.04	2.39		
	Lakshmipura Main Road to singapura Road	Cum	1	502.50	7.80	0.04	15.68		
	Cross roads (Beside Commander Glory	Cum	1	88.00	3.10	0.04	1.09		
		Cum	1	145.20	4.90	0.04	2.85		
	BALAJI LAYOUT								
	2nd main 1st cross	Cum	1	162.80	5.40	0.04	3.52		
	2nd main 2nd cross	Cum	1	63.80	3.80	0.04	0.97		
	(from 2nd main to MS	Cum	1	61.60	2.50	0.04	0.62		
	palya)	Cum	1	99.00	7.40	0.04	2.93		
	Basic rate							8502.00	
	Area weightage 6%							510.12	
	Total						**330.40**	**9012.12**	**2977576.33**
19	Providing Plastic to Bituminous concrete @ 8%								

	8% OF BC	Kg		8%	330.40	117.00	**3092.51**		
	Basic rate							27.00	
	Area weightage 6%							1.62	
	Total						**3092.51**	**28.62**	**88507.77**
20	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.185-I.No.24.15)								
	SIMHADRI LAYOUT								
	Dead end to commander apartment(right side)Main Road	Sqm	1	64.90	0.10		6.49		
	Lakshmipura Main Road to singapura Road	Sqm	1	502.50	0.10		50.25		
	Cross roads (Beside Commander Glory	Sqm	1	88.00	0.10		8.80		
		Sqm	1	145.20	0.10		14.52		
	BALAJI LAYOUT				0.10				
	2nd main 1st cross	Sqm	1	162.80	0.10		16.28		
	2nd main 2nd cross (from 2nd main to MS palya)	Sqm	1	63.80	0.10		6.38		
		Sqm	1	61.60	0.10		6.16		
		Sqm	1	99.00	0.10		9.90		
	Basic rate							512.00	
	Area weightage 6%							30.72	
	Total						**118.78**	**542.72**	**64464.28**
								Sub Total	**7910474.24**
	Preparation of DPR And Project management Consultancy Charges(2% of estimated cost)								180000
	Tender Premium 10% of estimated Cost								900000
	Miscellenious and rounding								9526
	TOTAL AMOUNT								**9000000**
	RUPEES NINTY LAKHS ONLY								

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

AE-II

ADMINISTRATIVE APPROVAL
Accorded For Rs. Ninety Lakhs only
Head of A/c P-3111
Div. Ref. No. 125/17-18 Date. 19/12/17
AE EE(BTP) 19/12

Technical Sanction
Accorded For RS ninety lacks only
Head of A/C P-3111
CER NO TS/493/17-18 Dt. 22.12.17
TA CE (YNK)

BRUHAT BANGALORE MAHANAGARA PALIKE

PACKAGE-8

NAME OF WORK : IMPROVEMENTS TO ROADS AND DRAINS AT KALTURU LAYOUT & GANGAMMA GUDI AREA, DEVAPPA LAYOUT, RAMACHANDRAPURA AREA IN WARD NO. 11 KUVEMPUNAGARA.

Sl.No.	Description of work	Mesurement					Qty	Rate	Amount
		Unit	No	L	B	D			
1	KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications. Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1)								
	Desilting drain								
	DEVAPPA LAYOUT								
	unnamed Road (ramchandrapura Main Road to ex-chairmen laxman house)	Cum	1	248.60	0.70	0.40	69.61		
	RAMCHANDRAPURA								
	Coconut garden, 5th cross	Cum	2	272.50	0.60	0.40	130.80		
	1st cross from main road	Cum	2	48.00	0.50	0.40	19.20		
	2nd cross from main road	Cum	2	56.00	0.45	0.40	20.16		
	3rd cross from main road	Cum	2	124.00	0.50	0.40	49.60		
	SINGAPURA GARDEN								
	2nd cross	Cum	2	147.00	0.60	0.40	70.56		
	3rd cross	Cum	2	134.00	0.60	0.40	64.32		
	4th cross	Cum	2	68.00	0.55	0.40	29.92		
	5th cross	Cum	1	63.00	0.50	0.40	12.60		
	BALAJI LAYOUT								
	3rd main road 1st cross	Cum	2	172.50	0.60	0.40	82.80		
	SIDHLINGESHWARA LAYOUT								
	1st cross	Cum	2	167.45	0.70	0.40	93.77		
	Basic rate							157.00	
	Area weightage 6%							9.42	
	Total						**643.34**	**166.42**	**107064.64**
2	Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32)								
	Closed Drain								
	Cover Slab								
	RAMCHANDRAPURA								
	Coconut garden, 5th cross	Sqm	2	272.50	0.60		327.00		
	3rd cross from main road	Sqm	2	124.00	0.50		124.00		
	SIDHLINGESHWARA LAYOUT								
	1st cross	Sqm	2	172.50	0.70		241.50		
	Open Drain (Sides & Bottom)								
	Drain slab								

	unnamed Road (ramchandrapura Main Road to ex-chairmen laxman house)	Sqm	1	248.60	1.80		447.48		
	RAMCHANDRAPURA								
	1st cross from main road	Sqm	2	48.00	1.70		163.20		
	2nd cross from main road	Sqm	2	56.00	1.65		184.80		
	SINGAPURA GARDEN								
	2nd cross	Sqm	2	147.00	1.80		529.20		
	3rd cross	Sqm	2	134.00	1.80		482.40		
	4th cross	Sqm	2	68.00	1.75		238.00		
	5th cross	Sqm	1	63.00	1.70		107.10		
	BALAJI LAYOUT								
	3rd main road 1st cross	Sqm	2	172.50	1.80		621.00		
	Sub Total						**3465.68**		
	Consider 5% Qnty for Removing						**173.28**		
	Basic rate							62.00	
	Area weightage 6%							3.72	
	Total						**173.28**	**65.72**	**11388.22**
3	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25-I.No.5.33)								
	Closed Drain								
	Cover Slab								
	RAMCHANDRAPURA								
	Coconut garden, 5th cross	Sqm	2	272.50	0.60		327.00		
	3rd cross from main road	Sqm	2	124.00	0.50		124.00		
	SIDHLINGESHWARA LAYOUT								
	1st cross	Sqm	2	167.45	0.70		234.43		
	Sub Total						**685.43**		
	Consider 30% Qnty for Removing & Refixing						**205.63**		
	Basic rate							76.00	
	Area weightage 6%							4.56	
	Total						**205.63**	**80.56**	**16565.47**
4	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.1)								
	Closed Drain								
	Cover Slab								
	RAMCHANDRAPURA								
	Coconut garden, 5th cross	Sqm	2	272.50	0.60		327.00		
	3rd cross from main road	Sqm	2	124.00	0.50		124.00		
	SIDHLINGESHWARA LAYOUT								
	1st cross	Sqm	2	167.45	0.70		234.43		
	Sub Total						**685.43**		
	Consider 5% Qnty for Refixing	Sqm					**34.27**		
	Basic rate							628.00	
	Area weightage 6%							37.68	

	Total							34.27	665.68	22813.85
5	Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.2)									
	Drain slab									
	DEVAPPA LAYOUT									
	unnamed Road (ramchandrapura Main Road to ex-chairmen laxman house)	Sqm	1	248.60	1.80		447.48			
	RAMCHANDRAPURA									
	1st cross from main road	Sqm	2	48.00	1.70		163.20			
	2nd cross from main road	Sqm	2	56.00	1.65		184.80			
	SINGAPURA GARDEN									
	2nd cross	Sqm	2	147.00	1.80		529.20			
	3rd cross	Sqm	2	134.00	1.80		482.40			
	4th cross	Sqm	2	68.00	1.75		238.00			
	5th cross	Sqm	1	63.00	1.70		107.10			
	BALAJI LAYOUT									
	3rd main road 1st cross	Sqm	2	172.50	1.80		621.00			
	Sub Total						**2773.18**			
	Consider 5% Qnty for Refixing						**138.66**			
	Basic rate								779.00	
	Area weightage 6%								46.74	
	Total						**138.66**		**825.74**	**114496.28**
6	KSRB 300-1 : Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications.(P.No.142,I.No.19.1)									
	SINGAPURA GARDEN									
	2nd cross	Cum	1	5.80	0.20	0.23	0.27			
	Basic rate								82.00	
	Area weightage 6%								4.92	
	Total						**0.27**		**86.92**	**23.19**
7	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139)									
	Considered same Qty vide I.No.1+I.No.6+ I.No.17	Cum					706.44			
	Average Weight of Earth (1.28 Ton/cum, Basic rate Rs.2.00 Tonne/Km.) For 15 Kms = (2.00 x 1.28 x 15)/-		38.40							
	KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1)		68.00							
	Total rate per Cum		106.40							
	Basic rate								106.40	
	Area weightage 6%								6.384	
	Total						**706.44**		**112.78**	**79674.99**

8	KSRRB 300-49. Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by manual means without disturbing the base and stacking of the debris materials including cost of all labour charges complete as per specifications (P.No.147,I.No.19.55)								
	RAMCHANDRAPURA								
	Coconut garden, 5th cross	Sqm	1	272.50	4.30		1171.75		
	Basic rate							57.00	
	Area weightage 6%							3.42	
	Total						**1171.75**	**60.42**	**70797.14**
9	KSRRB 500-1.Cleaning the existing WBM Road surface including removing of binding materials and other foreign matter with wire brushes and small picks sweeping with brooms or soft brushes and finally dusting with old gunny bags and bar or compressed air to receive bituminous treatment including cost of all materials, labhour, HOM of machineries complet as per specifications.(P.No.161,I.No.21.1)								
	RAMCHANDRAPURA								
	Coconut garden, 5th cross	Sqm	1	251.00	4.30		1079.30		
	SINGAPURA GARDEN								
	2nd cross	Sqm	1	5.80	0.20		1.16		
	Basic rate							13.00	
	Area weightage 6%							0.78	
	Total						**1080.46**	**13.78**	**14888.74**
10	KSRRB 500-9.Providing and applying tack coat using 80/100 grade bitumen (VG 10) on granular base such as WBM surface hot bitumen primed at 4kg per 10 sqm heating bitumen in boiler with spray set (Excluding cleaning of Road surface) inlcuding cost of all materials, labhour, HOM of machineries complete as perspecifications.(P.No.161,I.No.21.9)								
	Considered same Above Qty	Sqm					1080.46		
	Basic rate							18.00	
	Area weightage 6%							1.08	
	Total						**1080.46**	**19.08**	**20615.18**
11	KSRRB 500-11. Providing and laying bituminous macadam on prepared surface with crushed coarse as per design mix formula for base / binding courseincluding loading of aggregates with F.E. loader, hot mixing of stone aggregates and bitumen in hot mix plant,transporting the mixed material in tipper to paver and laying mixed materials, with paver finisher to the required level and grade,rolling by power roller to achieve the desired density,but excluding cost of primer/tack coat including lead,lift and cost of all materials,labour,HOM of machineries complete as per specifications MORTH chapter 5 Using 100/120 TPH capacity H.M.P with sensor paver Gr-II (50 mm to 75mm) with 3.4% VG - 30 Bitumen(P.No.162-I.No.21.11.2)								
	RAMCHANDRAPURA								
	Coconut garden, 5th cross	Cum	1	272.50	4.30	0.05	58.59		
	SINGAPURA GARDEN								
	2nd cross	Cum	1	5.80	0.20	0.05	0.06		
	Sub Total						**58.65**		
	Consider 5% qty for Profile correction and Dipression filling						**2.9323**		
	Basic rate							5409.00	
	Area weightage 6%							324.54	
	Total						**61.58**	**5733.54**	**353058.64**
12	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.2).								
	For Road surface								
	DEVAPPA LAYOUT								

	unnamed Road (ramchandrapura Main Road to ex-chairmen laxman house)	Sqm	1	248.60	3.80		944.68		
	RAMCHANDRAPURA								
	Coconut garden, 5th cross	Sqm	1	272.50	4.30		1171.75		
	1st cross from main road	Sqm	1	48.00	4.00		192.00		
	2nd cross from main road	Sqm	1	56.00	4.20		235.20		
	3rd cross from main road	Sqm	1	124.00	3.75		465.00		
	SINGAPURA GARDEN								
	2nd cross	Sqm	1	147.00	5.10		749.70		
	3rd cross	Sqm	1	134.00	4.80		643.20		
	4th cross	Sqm	1	68.00	5.00		340.00		
	5th cross	Sqm	1	63.00	5.10		321.30		
	BALAJI LAYOUT								
	3rd main road 1st cross	Sqm	1	172.50	5.00		862.50		
	SIDHLINGESHWARA LAYOUT								
	1st cross	Sqm	1	167.45	4.10		686.55		
	Basic rate							3.00	
	Area weightage 6%							0.18	
	Total						**6611.88**	**3.18**	**21025.76**
13	KSRRB M500-10.Providing and applying tack coat using 80/100 grade bitumen(VG10) in boiler fitted with spray set distributor at the rate of 0.20kg per sqm on the existing prepared bituminous surface cleaned with mechanical broom. complete as per specification. MORTH Specifiacation clause No. 503.using Bitumen 80/100 (VG-10) on Primed surface.(P.No.162,I.No. 21.10.2) .								
	For Road surface								
	DEVAPPA LAYOUT								
	unnamed Road (ramchandrapura Main Road to ex-chairmen laxman house)	Sqm	1	248.60	3.80		944.68		
	RAMCHANDRAPURA								
	Coconut garden, 5th cross	Sqm	1	272.50	4.30		1171.75		
	1st cross from main road	Sqm	1	48.00	4.00		192.00		
	2nd cross from main road	Sqm	1	56.00	4.20		235.20		
	3rd cross from main road	Sqm	1	124.00	3.75		465.00		
	SINGAPURA GARDEN								
	2nd cross	Sqm	1	147.00	5.10		749.70		
	3rd cross	Sqm	1	134.00	4.80		643.20		
	4th cross	Sqm	1	68.00	5.00		340.00		
	5th cross	Sqm	1	63.00	5.10		321.30		
	BALAJI LAYOUT								
	3rd main road 1st cross	Sqm	1	172.50	5.00		862.50		
	SIDHLINGESHWARA LAYOUT								
	1st cross	Sqm	1	167.45	4.10		686.55		

	Basic rate							9.00	
	Area weightage 6%							0.54	
	Total						6611.88	9.54	63077.29
14	KSRRB M500-19. Providing and laying bituminous concrete using crushed aggregates of specified grading,premixed with bituminous binder and filler,transporting the hot mix to work site,laying with a paver finisher to the required grade, level and alignment,rolling with smooth wheeled,vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No.500.9 complete in all respects complete as per specifications. using 40/60 TPH capacity H.M.P with mechanical Paver Gr-II(30mm to 45mm) with 5.4% CRMB 55 (P.No.165- I.No.21.23.6)								
	DEVAPPA LAYOUT								
	unnamed Road (ramchandrapura Main Road to ex-chairmen laxman house)	Cum	1	248.60	3.80	0.04	37.79		
	RAMCHANDRAPURA								
	Coconut garden, 5th cross	Cum	1	272.50	4.30	0.04	46.87		
	1st cross from main road	Cum	1	48.00	4.00	0.04	7.68		
	2nd cross from main road	Cum	1	56.00	4.20	0.04	9.41		
	3rd cross from main road	Cum	1	124.00	3.75	0.04	18.60		
	SINGAPURA GARDEN								
	2nd cross	Cum	1	147.00	5.10	0.04	29.99		
	3rd cross	Cum	1	134.00	4.80	0.04	25.73		
	4th cross	Cum	1	68.00	5.00	0.04	13.60		
	5th cross	Cum	1	63.00	5.10	0.04	12.85		
	BALAJI LAYOUT								
	3rd main road 1st cross	Cum	1	172.50	5.00	0.04	34.50		
	SIDHLINGESHWARA LAYOUT								
	1st cross	Cum	1	167.45	4.10	0.04	27.46		
	Profile correction & Pot Hole Filling	**No.*(1/2)*Length*(20%*Width)*Depth**							
	DEVAPPA LAYOUT								
	unnamed Road (ramchandrapura Main Road to ex-chairmen laxman house)	Cum	1	248.60	3.80	0.04	3.78		
	RAMCHANDRAPURA								
	Coconut garden, 5th cross	Cum	1	272.50	4.30	0.04	4.69		
	1st cross from main road	Cum	1	48.00	4.00	0.04	0.77		
	2nd cross from main road	Cum	1	56.00	4.20	0.04	0.94		
	3rd cross from main road	Cum	1	124.00	3.75	0.04	1.86		
	SINGAPURA GARDEN								
	2nd cross	Cum	1	147.00	5.10	0.04	3.00		
	3rd cross	Cum	1	134.00	4.80	0.04	2.57		
	4th cross	Cum	1	68.00	5.00	0.04	1.36		
	5th cross	Cum	1	63.00	5.10	0.04	1.29		
	BALAJI LAYOUT								

	3rd main road 1st cross	Cum	1	172.50	5.00	0.04	3.45		
	SIDHLINGESHWARA LAYOUT								
	1st cross	Cum	1	167.45	4.10	0.04	2.75		
	Basic rate							8502.00	
	Area weightage 6%							510.12	
	Total						**290.92**	**9012.12**	**2621828.48**
15	Providing Plastic to Bituminous concrete @ 8%								
	8% OF BC	Kg		8%	290.92	117.00	**2723.03**		
	Basic rate							27.00	
	Area weightage 6%							1.62	
	Total						**2723.03**	**28.62**	**77933.25**
16	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.185-I.No.24.15)								
	DEVAPPA LAYOUT								
	unnamed Road (ramchandrapura Main Road to ex-chairmen laxman house)	Sqm	1	248.60	0.10		24.86		
	RAMCHANDRAPURA				0.10				
	Coconut garden, 5th cross	Sqm	1	272.50	0.10		27.25		
	1st cross from main road	Sqm	1	48.00	0.10		4.80		
	2nd cross from main road	Sqm	1	56.00	0.10		5.60		
	3rd cross from main road	Sqm	1	124.00	0.10		12.40		
	SINGAPURA GARDEN								
	2nd cross	Sqm	1	147.00	0.10		14.70		
	3rd cross	Sqm	1	134.00	0.10		13.40		
	4th cross	Sqm	1	68.00	0.10		6.80		
	5th cross	Sqm	1	63.00	0.10		6.30		
	BALAJI LAYOUT								
	3rd main road 1st cross	Sqm	1	172.50	0.10		17.25		
	SIDHLINGESHWARA LAYOUT								
	1st cross	Sqm	1	167.45	0.10		16.75		
	Basic rate							512.00	
	Area weightage 6%							30.72	
	Total						**150.11**	**542.72**	**81464.99**
17	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202(P.No.138- I.No.18.47)								
	DEVAPPA LAYOUT								
	2nd Cross Road	Cum	1	130.90	3.20	0.15	62.83		
	Basic rate							781.00	
	Area weightage 6%							46.86	
	Total						**62.83**	**827.86**	**52016.10**

18	KSRRB M600-1. Construction of dry lean cement concrete mix CC1:5:10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383) aggregate cement ratio not to exceed 15:1. Aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications.MORTH Specification No. 601, Item No. 22.1, Pg No. 176								
	DEVAPPA LAYOUT								
	2nd Cross Road	Cum	1	130.90	3.20	0.15	62.83		
	Basic rate							3761.00	
	Area weightage 6%							225.66	
	Total						**62.83**	**3986.66**	**250489.82**
19	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) Pg No.177 Item No.22.6.1								
	DEVAPPA LAYOUT								
	2nd Cross Road	Cum	1	130.90	3.20	0.15	62.83		
	Sub Total						**62.83**		
	Consider 5% qty for camber correction						**3.14**		
	Basic rate							5866.00	
	Area weightage 6%							351.96	
	Total						**65.97**	**6217.96**	**410221.21**
20	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Conrete Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms and 2Ltr of Primer per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.192-1.No.24.57)								
	DEVAPPA LAYOUT								
	2nd Cross Road	Sqm	1	130.90	0.10		13.09		
	Basic rate							647.00	
	Area weightage 6%							38.82	
	Total						**13.09**	**685.82**	**8977.38**
								TOTAL AMOUNT	**4398420.62**
	Preparation of DPR And Project management Consultancy Charges(2% of estimated cost)								100000
	Tender Premium 10% of estimated Cost								500000
	Miscellenious and rounding								1579
								TOTAL AMOUNT	**5000000**
	RUPEES FIFTY LAKHS ONLY								

ADMINISTRATIVE APPROVAL
Accorded For Rs. Fifty lakhs only
Head of A/c ₹-3111
Div. Ref. No. 126/17-18 Date 19/12/17
AE
EE(DTP) 19.12

Technical Sanction
Accorded For Rs. Fifty lakhs only
Head of A/c ₹-3111
CER NO TS/494/17-18 Dt: 22.12.17
(YNK)

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017